



CYTEC INDUSTRIES INC.
Five Garret Mountain Plaza
West Paterson, NJ 07424
Tel: (973) 357-3100

June 10, 2004

Mr. Chris Jones, Section Chief
New Jersey Department of Environmental Protection
Bureau of Inland Regulation
501 East State Street
Station Plaza 5, 2nd Floor
Trenton, New Jersey 08625

Re: Application for Freshwater Wetland Letter of Interpretation Extension

Applicant: Cytec Industries Inc
Dated February 13, 2004

Dear Mr. Jones:

Alyson Gill from your Department requested file information for the ponded water in one of the six impoundments on the Carteret site. When impoundment operations ceased in the 1970s all of the impoundments were filled to the top of their berms with the exception of Impound 6, the last impound used.

After shutdown of the operations in 1974, during dry weather months serious dusting problems occurred which forced the shutdown of the Turnpike. Due to this situation, in 1978 we entered into an order with the NJDEP (amended consent judgment, attached) that required (Section 5, Page 8)) "American Cyanamid Company will undertake a program to establish suitable vegetation or otherwise permanently prevent soil erosion in the abandoned alum mud impounds.

Because the other 5 impounds were filled to berm height, the impermeable sludge did not collect run-on. Since we could not establish a water cover on them to prevent dusting, we implemented a study to establish vegetation covers.

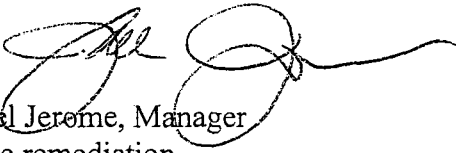
On impoundment 6, we repaired the berms to prevent illegal stormwater discharge. In doing so, we established a water cover that in turn suppressed the dusting.

Also attached for your information is a letter submitted to Mr. David Rislia dated 1997, requesting wetland Letter of Interpretation status. This letter provides background on the site as well as our future development plans.

In addition, I have included for your reference the NFA letter and the Declaration of Environmental Restrictions which mandates that we maintain the engineering and institutional controls (vegetative and water covers).

We would like to schedule a meeting with you, at your earliest convenience, to discuss this very important project with you and your staff. I can be reached at 973-569-4010

Sincerely,

A handwritten signature in black ink, appearing to read "Joel Jerome", with a long horizontal flourish extending to the right.

Joel Jerome, Manager
Site remediation

cc: E.C. Boyle
G. M. Wroblewski

CARTERET

See Page 8

WILLIAM F. HYLAND
ATTORNEY GENERAL OF NEW JERSEY
Attorney for Plaintiff
36 West State Street
Trenton, New Jersey 08625

BY: PETER J. HERZBERG
Deputy Attorney General
(609) 292-1546

SUPERIOR COURT OF NEW JERSEY
CHANCERY DIVISION, UNION CO
DOCKET NO. C-953-70

STATE OF NEW JERSEY, DEPARTMENT)
OF ENVIRONMENTAL PROTECTION,)

Plaintiff)

vs.)

Civil Action

AMERICAN CYANAMID COMPANY, a)
corporation of the State of)
Maine, authorized to do business)
in the State of New Jersey)

AMENDED CONSENT JUDGMENT

Defendant.)

This matter being opened to the court on a Joint Motion by William F. Hyland, Attorney General of the State of New Jersey attorney for plaintiff (Peter J. Herzberg, Deputy Attorney General appearing), and Robinson, Wayne & Greenberg, Esquires, attorneys for defendant (W. Hunt Dumont, Esquire, appearing), for the entry of an Amended Consent Judgment, amending in whole and superseding the Consent Final Judgment, dated February 25, 1972, in this matter and it appearing to the court that defendant is discharging industrial waste matter into the Arthur Kill and the Rahway River and has agreed to treat its industrial wastes; and it appearing that the above Consent Final Judgment no longer is consistent with

Federal and State water pollution control laws and regulations and the defendant's plans to abate water pollution; and it further appearing to the court that the parties hereby consent to the entry of this Amended Consent Judgment,

IT IS on this 18th day of April, 1978,

ORDERED:

I. WHOLE AMENDMENT OF ORIGINAL CONSENT FINAL JUDGMENT

That the original Consent Final Judgment in this matter, ordered on February 25, 1972, is hereby amended in whole and superseded.

II. REQUIREMENTS

That defendant, American Cyanamid Company, its agents, servants and officials and successors in interest at its Warners Plant, City of Linden, County of Union, State of New Jersey, shall meet the following requirements with respect to such Warners Plant:

A. Existing Discharges

The defendant's wastewater discharge systems shall comply with the effluent and water quality criteria outlined in II.D. below as well as the defendant's Federal National Pollutant Discharge Elimination System (NPDES) Permit, when it issues and becomes final (including any subsequent modification) under the Federal Water Pollution Control Act (herein called the "NPDES Permit"). The compliance dates for meeting the effluent and water quality criteria shall be governed by an Enforcement Compliance Schedule Letter (ECSL) of the Federal Environmental Protection Agency (EPA) as contemplated by II.D.1. below. Until the facilities referred to in II.D. below are fully operational, the existing outfalls at

their discharges will be considered interim discharges with respect to determining compliance with the provisions of this Judgment. During this interim period, these discharges are to be maintained in such a way that, as a minimum, the quality of the discharges and the loadings will not deteriorate from the interim limits in the ECSL referred to above. After September 30, 1978 the effluent quality and loadings of the consolidated discharges shall comply with the effluent criteria set forth in II.B. below.

B. Effluent Criteria

Subject to paragraph A above, the effluent criteria for the entire facility are:

1. pH: As specified in the NPDES Permit.
2. B.O.D.: As specified, in the aggregate for all outfalls, in the NPDES Permit.
3. Oils and grease: No noticeable increase above Arthur Kill water intake.
4. Suspended solids: As specified, in the aggregate for all outfalls, in the NPDES Permit.
5. Color: No significant increase when comparing the centrifuged outfall sample with the centrifuged Arthur Kill water intake sample.
6. Toxicity:
 - a. The toxicity, as measured by a 96-hour LC 50 bioassay conducted in a flow-proportional, 24-hour, composite sample of all outfalls, shall not be less than 500,000 ppm or 50%.

The method for determining such toxicity shall be conducted by defendant according to the method set forth in attached EXHIBIT I.

- b. Plaintiff reserves the right to undertake a bioassay study conducted on 4-hour composite samples (five grab samples in four hours) of each individual outfall for the purpose of developing and implementing an alternative procedure to determine compliance with II.B.6. The defendant shall not be bound by such alternative procedure, but the plaintiff reserves the right to proceed to enforce any violation as may be indicated by such alternative procedure.
- c. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Federal Water Pollution Control Act or any regulatory provision of the State of New Jersey for a toxic pollutant which is present in the discharge of defendant and such standard or prohibition is more stringent than any limitation for such pollutant hereinafter in or in the NPDES Permit, this Judgment and the NPDES Permit shall be revised or modified in accordance with the toxic ef-

fluent standard or prohibition and the defendant so notified.

C. Water Quality Criteria

All discharges shall be controlled in such a way that New Jersey Surface Water Quality Standards (N.J.A.C. 7:9-4 et seq) for the Arthur Kill and the Rahway River, both classified as TW-3 waters, shall not be contravened as a result of defendant's discharge.

D. Modification of Facilities

1. Schedules

In order to meet requirements of defendant's proposed Federal NPDES Permit and to insure that the effluent criteria of this Amended Consent Judgment are consistently met, additional treatment schemes, source separation and process replacements shall be implemented. Some of these proposals are as follows:

- a. Skinner for outfall 008 (to meet BOD and COD requirements)
- b. Flow measurement and consolidation of plant outfalls
- c. Acrylamide plant replacement for outfall 005 (to meet BOD, COD, SS, Oil and Grease, $\text{NH}_3(\text{N})$, and Sulfate requirements)
- d. Source separation for outfall 002 (to meet BOD, COD, SS, Oil and Grease, and TKN requirements)

- e. Activated carbon treatment of DPG wastewater (to meet BOD, COD, SS, Oil and Grease, and requirements)
- f. Source separation and neutralization system outfall 006 (to meet BOD, COD, SS, Oil and Grease, and pH requirements)
- g. Consolidating outfalls 001, 002 and 003 to form new outfall A.
- h. Redesignating outfall 004 outfall B
- i. Redesignating outfall 005 outfall C
- j. Consolidating outfalls 006, 008 and 009 to form new outfall D
- k. Redesignating outfall 010 outfall E.

Time schedules for these proposals are appended. For any such schedules for achieving compliance with this Amended Consent Judgment extending past July 1, 1977, defendant shall request an ECSL from Federal EPA. Defendant shall also obtain the approval of the NJDEP for any changes in the modification of facilities and the above schedules; such approval may take the form of a letter from the New Jersey Department of Environmental Protection to American Cyanamid.

Z. Phosphorus and Phosphorous Compounds

Defendant will have facilities for the removal of phosphorus and phosphorous compounds from its organic waste incinerator discharge fully operational by September 30, 1978. Phos-

phorus and phosphorous compounds discharged from outfall 005 is permitted until the above date.

3. New Source Discharges

There shall be no waste water discharges from new or modified sources, commencing after the date hereof, other than uncontaminated cooling water, from any outfall, unless authorized and permitted by N.J.S.A. 58:10A-1, et seq. and/or any amendments thereof.

4. Cyanide Treatment Plant

The effluent from the cyanide treatment plant shall meet the following limits which are to be incorporated in New Jersey Permit to Construct and to Operate a Wastewater Treatment Plant No. Ind-R-74-10-13, and compliance with which may be measured by any statistically valid test:

- a. Cyanide shall be less than .7 mg/l maximum and less than .4 mg/l over any 4 hour period.
- b. Cyanate should be less than 2 mg per liter as a monthly average and less than 6 mg per liter as a daily maximum; provided, that these limitations shall become effective six months after the date of entry of this Amended Consent Judgment, unless the parties shall mutually agree upon another effective date or other limitation. Furthermore, American Cyanamid Company shall attempt to develop an accurate test for cyanate other than by pH and ORP and shall submit bi-monthly progress reports to the New Jersey De-

partment of Environmental Protection
regarding its development efforts.

American Cyanamid Company must monitor its cyanide discharge at the cyanide treatment plant rather than at the outfall required by the Consent Final Judgment dated February 25, 1972. This discharge shall be continuously measured for cyanide and cyanate by pH and ORP and the monthly reports shall indicate the pH and ORP readings along with the appropriate conversion to give the cyanide levels in the discharge. Said monitoring shall provide for early detection of high levels of cyanide from the cyanide treatment plant. American Cyanamid shall take such measures as may be necessary to prevent the levels of cyanide and cyanate from exceeding limits in State and Federal permits.

5. Alum Mud Ponds

American Cyanamid Company will undertake a program to establish suitable vegetation or otherwise permanently prevent soil erosion in the abandoned alum mud impounds.

E. Ocean Disposal Alternative

Defendant will continue ^aits program to implement an alternative to ocean disposal of aqueous waste.

F. Reporting

1. Copies of monthly NPDES Monitoring reports will be forwarded to NJDEP.

2. Copies of proposed schedules for compliance with NPDES Permit requirements will be forwarded to NJDEP.

3. Copies of all progress reports for authorized compliance programs will be forwarded to NJDEP.

4. Quarterly progress reports on the phosphorus and phosphorous compounds removal facilities, referred to in II.D.2. above will be forwarded to NJDEP within fifteen (15) days after end of March, June, September and December of 1977, and after the end of March, June and September, 1978.

5. Copies of reports on semi-annual tests for toxic substances as specified in II.B.6.a. above, will be forwarded to NJDEP.

6. American Cyanamid shall monitor its effluent for petroleum hydrocarbons using the Federal EPA-Environmental Monitoring and Support Laboratory Method (Freon Extraction-silica gel adsorption-infrared measurement).

7. American Cyanamid shall monitor its effluent for the criteria set forth in II.B. above. During the interim period described in II.A., American Cyanamid shall monitor its effluent for the parameters measured in the organic waste incinerator monitoring program set forth in the appended letters dated December 22, 1976 and February 9, 1977 and the attachments thereto.

III. FORCE MAJEURE

Defendant shall not be responsible for failure to perform, or for delay in the performance of, any of its obligations where such failure or delay is beyond its reasonable control.

IV. COMPLETION OF ORIGINAL CONSENT FINAL JUDGMENT

Since the original Consent Final Judgment has merged with and been amended and superseded by this Amended Consent Judgment,

defendant shall not be given notice of nor held liable for any alleged past violations of the original decree. However, this waiver does not exclude defendant from liability for spills or discharges of hazardous or toxic materials during the period of the original decree.

V. PLAINTIFF'S RESERVATIONS

Notwithstanding any other provision contained herein, this Amended Consent Judgment shall not be construed to preclude plaintiff from imposing effluent limitations or other controls on the defendant with respect to parameters which are not included in II.B. of this Amended Consent Judgment. In addition, the State is not precluded hereby from imposing more stringent effluent limitations or other controls on the defendant with respect to parameters which are included in II.B. of this Amended Consent Judgment to the extent that federal or state law requires modification hereof. Moreover, the State is not precluded from imposing more stringent effluent limitations or other controls on the defendant upon the expiration, revocation or supersession of the present NPDES Permit.

IT IS FURTHER ORDERED:

That plaintiff shall have the right to a hearing before this court for any alleged violations of this Amended Consent Judgment. The hearing shall not be held until at least ten (10) days have expired after the date defendant has been served with a notice and supporting affidavits (attention of its Legal Department, American Cyanamid Company, Wayne, New Jersey 07470). Responding affidavits shall be served on

plaintiff a reasonable time prior to the date set for the hearing.

Harold A. Ackerman

HAROLD A. ACKERMAN^{J.} S.C.
J. S. C.

We hereby consent to the form and entry of the within Judgment.

ROBINSON, WAYNE & GREENBERG, ESQS.
Attorneys for Defendant
American Cyanamid Company

By *W. Mont Dumont*
W. Mont Dumont, Esquire

WILLIAM F. HYLAND
ATTORNEY GENERAL OF NEW JERSEY
Attorney for Plaintiff

By *Peter J. Herzberg*
Peter J. Herzberg
Deputy Attorney General



CYTEC INDUSTRIES INC.
Warners Plant
P.O. Box 31
Foot of Tremley Pt. Rd.
Linden, NJ 07036
Tel: (908) 862-6000

Transmitted Via Federal Express

August 29, 1997

Mr. David Rislia
Land Use Regulation Program
New Jersey Department of Environmental Protection
501 East State Street
C.N. Box 401
Trenton, New Jersey 08625-0401

Re: Cytec Carteret Impoundments Wetlands Status

Dear Mr. Rislia:

This letter is intended as a follow-up to our conversation regarding the wetlands status of the Carteret, New Jersey Facility. As you are aware, we are presently considering a redevelopment scenario for the sludge impounds portion of the site which involves the placement of stabilized dredge material. Since our proposed project will involve a commitment of significant resources, we do not wish to proceed until a preliminary determination has been made by the NJDEP regarding the wetlands status at the facility. Our objective with this letter is to provide the NJDEP with sufficient information to make a preliminary determination regarding wetlands surrounding the sludge impoundments. If based on review of the information provided, it appears that the wetlands delineation is generally acceptable to the NJDEP, we will proceed with the more formal applications and permitting for the facility.

For your review, Attachment 1 presents a summary of the proposed redevelopment program for these impounds. Generally, the proposed program involves the placement of 20 to 30 feet of stabilized dredge material over the existing impounds to produce a site which will be suitable for redevelopment. This program will benefit the Borough of Carteret and the New Jersey/New York metropolitan region in several ways including facilitating redevelopment of the otherwise abandoned site and the Borough of Carteret's plans for constructing the Carteret Mall.

Based on our previous conversation, it is our understanding that actual impound areas containing sludge from former manufacturing operation would not be considered to be wetlands, however, areas outside of the impound berms may be considered wetlands based on the NJDEP delineation criteria. Attachment 2 presents a preliminary wetlands delineation map including the approximate mean high water elevation, and drawings presenting cross-sections of the sludge material within the impounds.

Attachment 1

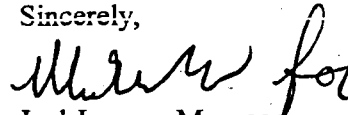
Project Description

CYTEC

Mr. David Rislia
August 29, 1997
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We appreciate your continued cooperation regarding the site. If you should have any questions or require additional information, please do not hesitate to contact me at (908) 862-6000 Ext.486.

Sincerely,

A handwritten signature in dark ink, appearing to read "Joel Jerome", followed by the word "for" in a cursive script.

Joel Jerome, Manager
Site Remediation

cc: A. N. Johnson, Blasland, Bouck & Lee, Inc
H. Shah, NJDEP
J. Pecchioli, NJDEP

Cytec Industries Inc.
Proposal for the Redevelopment of the Carteret Impoundments

This document presents an overview of Cytec Industries Inc. (Cytec) proposal to redevelop its Carteret Impoundment property for future industrial use. The 120 acre site, located at the confluence of the Rahway River and the Arthur Kill in the Borough of Carteret, Middlesex County (see Figure 1), currently contains approximately 85 acres of impoundments containing process residuals generated from production operations at Cytec's (and its predecessor - the American Cyanamid Company) Warners Plant in Linden.

The Carteret property currently has very limited redevelopment potential due to the process residual's lack of structural integrity and the site's location in the flood plain. Cytec is proposing to place treated dredge materials on the site to provide the structural integrity to make it suitable for future industrial development.

This redevelopment program provides both short and long term benefits to the Borough of Carteret, the New Jersey/New York metropolitan region, and Cytec in the following ways:

1. This future industrial development will allow for the continued expansion of the ongoing program in Carteret to redevelop distressed industrial properties - therefore adding jobs and tax rateables which will benefit the Borough of Carteret and the surrounding communities.
2. This project will directly support the Carteret Mall project being developed in accordance with the recently enacted Environmental Opportunities Act and consistent with the brownfield development program as it will provide the land necessary to relocate a business that is presently operating on the property of the future mall.
3. It will provide immediate and economic upland disposal capacity for treated dredge materials from the New York/New Jersey Harbor, thereby assisting the region by allowing the New York/New Jersey Harbor to remain a viable port.
4. It will enhance the NJDEP approved remedial action plan for the Carteret Impoundments by further isolating the process residuals from the environment with an impermeable barrier.
5. It will allow Cytec to convert a currently environmentally impacted property with very limited future beneficial reuse potential to property that may be used for future industrial development.

This document provides a summary of the historical site use, the site's regulatory history, and Cytec's proposed redevelopment plan.

1. Historical Site Use

- a. From the 1930s to 1974, the American Cyanamid Company operated six bermed impoundments on a 120 acre site in Carteret for the management of residuals from the production of alum and yellow prussiate of soda (YPS) at their Linden manufacturing plant.
- b. Alum is commonly used as a flocculating agent in the treatment of drinking water. Alum production at the Warners plant involved the digestion of aluminum ore (bauxite) with sulfuric acid, resulting in a silica byproduct referred to as alum mud. Water was added to the alum mud to form a slurry, which was neutralized by addition of sodium hydroxide, prior to placement at the Carteret Impoundments.

- c. YPS has a variety of practical uses, including anti-caking of table and road salts, film development, electroplating, dyeing of textiles, and trace metal removal. YPS production at the Warners plant involved the reaction of calcium cyanide with ferrous sulfate to yield sodium ferrocyanide. During the reaction, calcium carbonate and calcium sulfate precipitate. Calcium ferrocyanide is decomposed by addition of soda ash, then filtered. The filtrate is concentrated and the sodium ferrocyanide crystallizes.

The alkaline filtrate, or YPS mud consisting primarily of calcium carbonate and calcium sulfate was slurried with water and combined with the alum mud, providing additional neutralization of the alum mud. A neutral residue resulting from the combination of the two process muds was then pumped to the Carteret Impoundments for settling and natural dewatering.

- d. There is estimated to be 1.5 million tons of alum and YPS muds deposited in the Carteret Impoundments. The Impoundments, which cover approximately 85 acres of the 120 acre site, were constructed by building berms within the marshlands using imported soils. Figure 2 shows the footprint of the berms as of 1955 when the last of the impoundments was constructed. The remaining 35 acres has always been undisturbed marshland.

2. Regulatory History

The Carteret Impoundment site has been the subject of three State mandated environmental programs. The investigating, engineering and construction efforts completed by Cytec in meeting the requirements of these programs resulted in the New Jersey Department of Environmental Protection (NJDEP) approval of a monitor/maintenance only remedial action program in February 1995. Each of these regulatory programs are summarized below.

- a. The process residuals placed in the Carteret Impoundments will not support vegetative growth. Figure 3 is a 1980 aerial photograph of the impoundments which illustrates the lack of vegetation on the impoundments six years after the cessation of the placement of materials. In times of dry weather, the surface of the residuals would dry out and create a dusting problem. In the summer of 1977, this problems became so severe that the dusting from these impoundments caused the New Jersey Turnpike to be shut down for a few hours. As a result of this, American Cyanamid entered into an Administrative Consent Order (ACO) with the NJDEP to address this dusting problem. In 1988, a multi-year program consisting of filling, grading, and the establishment of vegetative and water covers on the impoundments was completed to address the dusting problem and meet the requirements of the ACO. Figure 4 is a 1990 aerial photograph illustrating the present water and vegetative covers.
- b. In accordance with the NJDEP policy at the time, in 1986 a New Jersey Pollutant Discharge Elimination System/Discharge to Groundwater (NJPDES/DGW) permit was issued for the Carteret Impoundments. This permit required that ground-water quality be monitored at the Carteret Impoundments. In accordance with the requirements of the permit, ground-water quality was monitored from 1987 to 1992. In 1990, the NJPDES/DGW permit was withdrawn by the NJDEP.
- c. In August 1993, Cyanamid and the NJDEP executed an amendment to the ACO for the Linden Plant requiring the evaluation of potential contamination at the Carteret Impoundments. As a result of the evaluations completed in accordance with the

requirements of the ACO, Cytec proposed and the NJDEP approved in February 1995, the following remedial program for the Carteret Impoundments:

- I. the completion of a five-year monitoring program for surface water and ground water; and,
- II. the establishment of a Declaration of Environmental Restrictions (DER) requiring continued management of the residual already impounded and continued maintenance/monitoring activities of the impoundment berms and soil/water covers.

A copy of the NJDEP letter approving this remedial program is presented as Attachment 1. Cytec is presently implementing this remedial program to maintain the water and vegetative covers as well as the berms.

3. Proposed Redevelopment Plan

Cytec is proposing to use treated dredged material from New York/New Jersey Harbor, private docks, and/or sediments under the responsibility of the US Army Corps of Engineers to further fill the present footprint of the impoundments (85 acres) to make that area suitable for future industrial development. The proposed development of the property has been defined to meet the specific needs of the on-going Carteret mall project that is being constructed on the adjacent Carteret Landfill. Approximately 25 acres of the 85 acres to be filled will be filled with approximately 25 feet of treated dredge materials with a final grade suitable for development and use by the business being relocated from the future mall property. The remaining 60 acres will be filled to provide a visual barrier between the relocated business and the mall as well as to provide a potential location for future industrial uses. The existing 35 acres of previously undisturbed marshlands will remain undisturbed as part of this redevelopment project. Figure 5 present a conceptual grading plan for the above described redevelopment of this property.

The treated dredge material will enhance the NJDEP approved remedial action plan and provide the structural integrity to allow for future industrial development. The low permeability of the treated dredge material will further isolate these impoundments from the environment by capping them with at least 25 feet of this material. The treated dredge material produces a structural fill that provides the structural integrity to allow for the future industrial development of this property.

REMEDIAL INVESTIGATION WORK PLAN

Carteret Impoundments
Borough of Carteret, New Jersey

American Cyanamid Company

December 1993



BLASLAND & BOUCK ENGINEERS, P.C.
BLASLAND, BOUCK & LEE
ENGINEERS & SCIENTISTS

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its tidal tributaries as a SE3 water body (N.J.A.C. 7:9-4.15). The designated uses of these tidal SE3 water bodies are as follows:

- a. Secondary contact recreation (boating and fishing);
- b. Maintenance and migration of fish populations;
- c. Migration of diadromous fish;
- d. Maintenance of wildlife; and
- e. Any other reasonable uses [N.J.A.C. 7:9-4.12(f)].

2.5.3 Wetlands

Presence of wetlands on or in the vicinity of the Carteret Impoundments was determined by review of the NJDEPE Freshwater Wetlands Map for the northwest quarter of the Arthur Kill USGS topographic quadrangle. Figure 5 identifies the wetlands for the Carteret Impoundments based on the NJDEPE Freshwater Wetlands Map.

Five of the impoundments are mapped as modified land (.48, or MODD). Impoundment No.1 and other areas bordering the Rahway River are mapped as not-designated or unknown wetlands (424, or UWL). Most areas designated as UWL were along the intertidal banks of the Rahway River. The impoundment berms are mapped as upland. A portion of Impoundment No.2 comprising the southern half of the impoundment is mapped as an estuarine intertidal emergent persistent irregular wetland (.187, or E2EM1P). System designations and delineations mapped by NJDEPE have not been verified.

2.6 Previous Mitigative Measures

Cyanamid has completed several projects to enhance residue containment at the Carteret Impoundments by improving erosion control and reducing dust generation by reinforcing dikes and establishing a stable vegetative cover. In

April 1978, Cyanamid and the NJDEPE negotiated an Amended Consent Judgement that directed Cyanamid to establish "suitable vegetation or otherwise permanently prevent erosion" at the Carteret Impoundments. All entrances and roads at the site have been stabilized by railroad ties covered with crushed stone. Routine inspection of impoundment stability is also performed, and maintenance is performed as necessary.

Cyanamid undertook a soil amendment and revegetation project based on an evaluation of tests plots at the Carteret Impoundments where soil amendment and seed types were varied (Dames & Moore 1981). These test plots indicated that the impoundment cover present in 1981 would not rapidly promote and sustain a vegetative community. The natural vegetative cover established on Impoundment No. 1 and around the perimeter of several other impoundments was attributed to contaminant reduction, soil buildup, and vegetation establishment which occurred over the 40 to 60 years since these impoundments first were used. Cyanamid hastened this process of natural succession through a three-phase soil amendment and revegetation project.

Earthlife, a compost sewage sludge product, has been recycled as impoundment cover and organic growing medium for the reclamation and revegetation project. All work has been performed in accordance with the requirements for Soil Erosion and Sediment Control in New Jersey (American Cyanamid 1988). All permits were obtained for the project, including an NJDPES exemption by NJDEPE to utilize sewage sludge as an impoundment soil cover and organic growing medium.

The three phases of the revegetation project were as follows:

- Phase I: Soil amendment and revegetation for 20 of 25 acres comprising Impoundments Nos. 4 and 5. This project was completed in 1987.

- Phase II: Restoration of berms and vegetation on 26 of 36 acres comprising Impoundments Nos. 3 and 6. This project was completed in 1988.
- Phase III: Restoration of berms and vegetation on 20 to 25 acres comprising Impoundment No. 2.

Impoundment No. 1 has a stable cover of common reed that has established by natural succession and did not require enhancement.

OENJ Cherokee Realty Holdings, LLC**FAX COVER SHEET**

61 North Hook Road
Bayonne, NJ 07002
(201) 823-0900
(201) 823-0661 (Fax)

TO: JOEL PERONE FROM: Leslie A. Mesnick
FAX#: (973) 569-4011 DATE: 5/6/02
RE: Site Visit
CC: Dennis Krumholz FAX#: (973) 538 1984
CC: Mike Caponegro FAX#: (973) 569 4011
CC: _____ FAX#: _____

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Sender: Leslie Mesnick

If you did not receive all pages, please notify the sender via telephone at 201-377-9307 or via email lmesnick@oenj-cherokee.com .

OENJ Cherokee Corporation



61 North Hook Road
Bayonne, NJ 07002
201.823.0900
201.823.0661 Fax

May 6, 2002

Joel Jerome, Manager - Site Remediation
Cytec Industries, Inc.
Five Garret Mountain Plaza
West Paterson, NJ 07424
VIA TELEFAX 973-569-4011

Re: Cytec Carteret Property, Carteret, NJ

Dear Joel:

I am writing to notify Carteret Development, LLC of our intention to visit the Carteret property later this week, and to provide it with our plan to collect samples of the sludge material. Pursuant to Section 15 (a) (i) of the Agreement of Sale dated April 4, 2002, CIP II Acquisition, LLC is required to obtain written approval prior to performing any sampling.

We intend to perform the following work on Thursday, May 9, 2002:

- Obtain several samples of representative sludge material from the impoundments.

It is expected that approximately three (3) five-gallon pails of material will be obtained. The samples will be subjected only to physical and geotechnical testing at this time. If chemical analysis is required at a later date, a separate sampling plan will be submitted.

- Perform a visual inspection of the wetlands areas. No physical sampling or hand augering will be used for this task.

In addition, our surveyors, Lynch, Giuliano, & Associates, will be at the site beginning tomorrow, May 7, 2002, to perform a boundary survey.

Please provide your written approval of this sampling at your earliest convenience.

Please also advise as to whether Carteret Development, LLC will have a representative present and whether it intends to split samples. If you have any questions, please contact me at 201-377-9307. Thank you.

Sincerely,



Leslie A. Mesnick
Project Manager

Cc: Dennis Krumholz, Esq., Riker Danzig et al.
Michael Caponegro, Cytex Industries



OENJ Cherokee Corporation

CYTEC

CYTEC INDUSTRIES INC.
Warners Plant
P.O. Box 31
Foot of Tremley Pt. Rd.
Linden, NJ 07036
Tel: (908) 862-6000

May 5, 1995

Mr. Haiyesh Shah, Case Manager
New Jersey Department of Environmental Protection
Bureau of Federal Case Management
Division of Responsible Party Site Remediation
401 East State Street, 5th Floor
CN-028
Trenton, New Jersey 08625-0028

**RE: Cyttec Industries Inc.
 Carteret Impoundments
 Declaration of Environmental Restrictions
 Remedial Action Plan Addendum**

Dear Mr. Shah:

Enclosed for your records is a copy of the Declaration of Environmental Restrictions for the Carteret Impoundments, filed with the Middlesex County Clerk on May 4, 1995 in accordance with the approved Remedial Action Plan Addendum.

Sincerely,

CYTEC INDUSTRIES INC.


Joel Jerome
Manager, Site Remediation

JJ:jgw
Enclosure

cc: K. Koster

bcc: J. M. Adragna
 R. L. Hillard
 M. G. Caponegro
 W. Moore
 R. B. Tabakin

DECLARATION OF ENVIRONMENTAL RESTRICTIONS MAY 4 2 31 PM '95

DENNIS L. LITTLE
MIDDLESEX COUNTY CLERK

This Declaration of Environmental Restrictions, made as of the 24th day of April, 1995, by Cytec Industries Inc. Five Garret Mountain Plaza, West Paterson, New Jersey 07424 ("Owner").

WITNESSETH:

WHEREAS, Owner is the owner in fee simple of certain real property (the "Property") designated as Lot 21, Block 9.03; Lots 8-10, 12-21, Block 10; and Lots 8, 10-14, 28, Block 11.01, on the tax map of the Borough of Carteret, Middlesex County, more particularly described on Exhibit A attached hereto and made a part hereof; and

WHEREAS, the New Jersey Department of Environmental Protection ("the Department") has issued a remedial approval on February 6, 1995, for the Cytec Carteret Impoundments Site concerning the Property in which the Department has approved the use of non-residential soil standards, institutional controls, and/or engineering controls in accordance with P.L. 1993 c. 139 (S-1070); and

WHEREAS, this Declaration itself is not intended to create any interest in real estate in favor of the Department, nor to create a lien or encumbrance against the Property, but merely is intended to reflect the regulatory and statutory obligations imposed as a condition of using non-residential standards; and

WHEREAS, the areas described on Exhibit B attached hereto and made a part hereof (the "Affected Areas") contain contaminants; and

WHEREAS, the type, concentration and specific location of the contaminants are described on one or more diagrams, maps and/or tables on Exhibit B attached hereto and made a part hereof; and

WHEREAS, in accordance with the remedial approval, and in consideration of the terms and conditions of the remedial approval, and other good and valuable consideration Owner has agreed to subject the property to certain statutory and regulatory requirements which impose restrictions upon the use of the Property, and to restrict certain activities at the Property, as set forth below; and

WHEREAS, Owner intends to notify all interested parties that such regulatory and statutory restrictions shall be binding upon and enforceable against Owner and any person who operate at the Property ("Operator"); and

WHEREAS, the Department will reevaluate the restrictions within five years to determine whether modifications to, or elimination of, the restrictions should be made;

NOW, THEREFORE, Owner agrees to be subject to the regulatory and statutory requirements applicable to those who seek to remediate property to non-residential standards and hereby notifies all interested parties, Owners, and Operators that the applicable regulations and statutes require of Owner and Operators while owning or operating the Property the following restrictions:

1. Restricted Uses. Owner, and all Operators of such portions of the Property, shall not allow any of the following uses of the following portions of the Property:

<u>Portion of the Property</u>	<u>Restricted Use</u>
The Affected Areas as identified in Exhibit B	The use shall be restricted pursuant to Paragraphs 2 and 3.

2. Emergencies. In the event of an emergency which presents a significant risk to human health, safety, or the environment, the application of Paragraph 1 above may be unilaterally suspended, by Owner, provided the Owner:

- [a] Immediately notifies the Department of the emergency;
- [b] Limits both the actual disturbance and the time needed for the disturbance to the minimum reasonable necessary to adequately respond to the emergency;
- [c] Implements all measures necessary to limit actual or potential, present or future risk of exposure to the residual contamination to humans or the environment; and
- [d] Implements restoration of the Affected Areas to the pre-emergency conditions to the extent reasonably possible, and provides a report to the Department of such emergency efforts.

3. Alterations, Improvements, and Disturbances. Owner and Operators shall not make, nor allow to be made, any alteration, improvement, or disturbance in, to, or about the Affected Areas which creates an unacceptable risk of exposure to contamination in the Affected Areas to humans or the environment, or result in a disturbance of any engineering control designed to contain or reduce exposure to the contaminants, without first obtaining the express written consent of the Department, which consent shall be given or withheld at the reasonable discretion of Department. Access shall be controlled by posting signs along the frontage of the Rahway River and the Arthur Kill to deter trespassing. Nothing herein shall constitute a waiver of the Owner's obligation to comply with all applicable laws and regulations.

Express written consent of the Department is not required for any alteration, improvement, or disturbance that:

- [a] provides for restoration of any disturbance of an engineering control to pre-disturbance conditions within sixty days, and
- [b] does not allow an exposure level above those noted under Restricted Uses; provided that all applicable worker health and safety laws and regulations are followed during the alteration, improvement, or disturbance.

4. Notice to Lessees and Other Holders of Property Interests.

- [a] Owner shall cause all leases, grants, and other written transfers of interest by the Owner in the Affected Areas and adjacent to the Affected Areas to contain a provision expressly requiring all holders thereof to take the property subject to the use restriction and not to violate any of the conditions of this Declaration of Environmental Restrictions.
- [b] Nothing contained in this paragraph 4 shall be construed as limited any obligation of Owner to provide any notice required by any law, regulation, or order of any governmental authority.

5. Enforcement of Violations. The restrictions provided herein are for the benefit of, and shall be enforceable against any person who knowingly violates this Declaration, solely by the Department. A violation of this Declaration of Environmental Restrictions shall not have an adverse impact on the status of the ownership of and title to the Property. To enforce violations of this Declaration of Environmental Restrictions, the Department may initiate an action in Superior Court or as otherwise allowed by law against any person who is responsible for a violation hereof and seek all available remedies, including without limitation, penalties and injunctive relief. Such enforcement proceedings shall not be initiated against past owners or operators who have not violated this Declaration.

6. Severability. If any court or other tribunal determines that any provision of this Declaration is invalid or unenforceable, such provision shall be deemed to have been modified automatically to conform to the requirements for validity and enforceability as determined by such court or tribunal. In the event that the provision invalidated is of such a nature that it cannot be so modified, the provision shall be deemed deleted from this instrument as though it had never been included herein. In either case, the remaining provisions of this Declaration shall remain in full force and effect.

7. Successors and Assigns. This Declaration shall be binding upon Owner, any Operator of the Affected Areas and the Department, its agents, contractors, and employees, and to any other person performing remediation at the Affected Areas under the direction of the Department.

8. Termination and Modification.

- [a] This Declaration shall terminate only upon filing of an instrument, executed by the Department, in the office of the Clerk, Register of Deeds and Mortgages of Middlesex County, New Jersey, expressly terminating this Declaration.
- [b] Owner may request in writing at any time that the Department modify or terminate this Declaration of Environmental Restrictions or execute termination proceedings based on, for example, the Owner's proposal that the property does not pose an unacceptable risk to human health or the environment. Within 90 calendar days after receiving the request the Department shall either:
 - i. execute the termination or modification Declaration; or
 - ii. issue a draft notice of intent to deny.

The Department shall set forth in a draft notice of intent to deny the request its basis for its decision. The Owner can respond to the draft denial by providing new or additional information or data. The Department shall review any such new or additional information and issue a final decision to execute the agreement or deny the request within 60 calendar days of the Department's receipt of the Owner's response.

IN WITNESS WHEREOF, Owner has executed this Declaration as of the date first written above.

ATTEST:

E. J. Malone
Assistant Secretary

CYTEC INDUSTRIES INC.

By: J.B. Reid
Vice President, Manufacturing

CERTIFICATION

State of New Jersey]
 PASSAIC] ss:
County of Middlesex]

I certify that on April 26, 1995, ^{E.F. MALONE}~~J.B. Reid~~ personally came before me, and I acknowledge under oath, that:

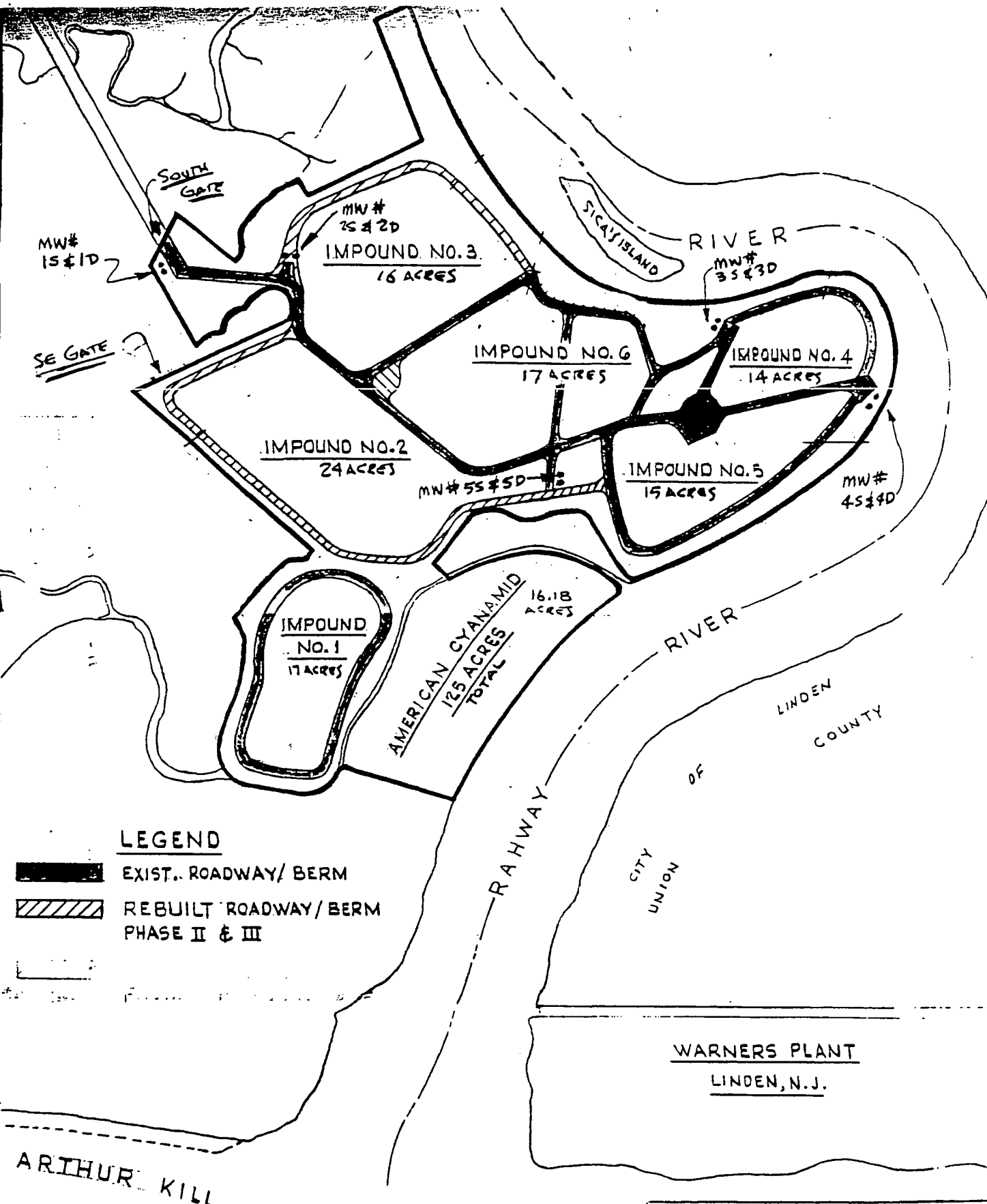
- a] I am the Assistant Secretary of Cytec Industries Inc.
- b] I am the attesting witness to the signing of this document by the proper corporate officer who is the Vice President of the Corporation;
- c] This document was signed and delivered by the corporation as its voluntary act and was duly authorized;
- d] The proper seal of the corporation was affixed to this document; and
- e] I sign this proof to attest to the truth of these facts.

E.F. Malone
E.F. Malone
Assistant Secretary

Signed and Sworn before me on
April 26, 1995.
Rosary A. Gaffney
ROSARY A. GAFFNEY
NOTARY PUBLIC OF NEW JERSEY
COMMISSION EXPIRES 7/23/98
Notary Public

EXHIBIT A

Tax Map



LEGEND

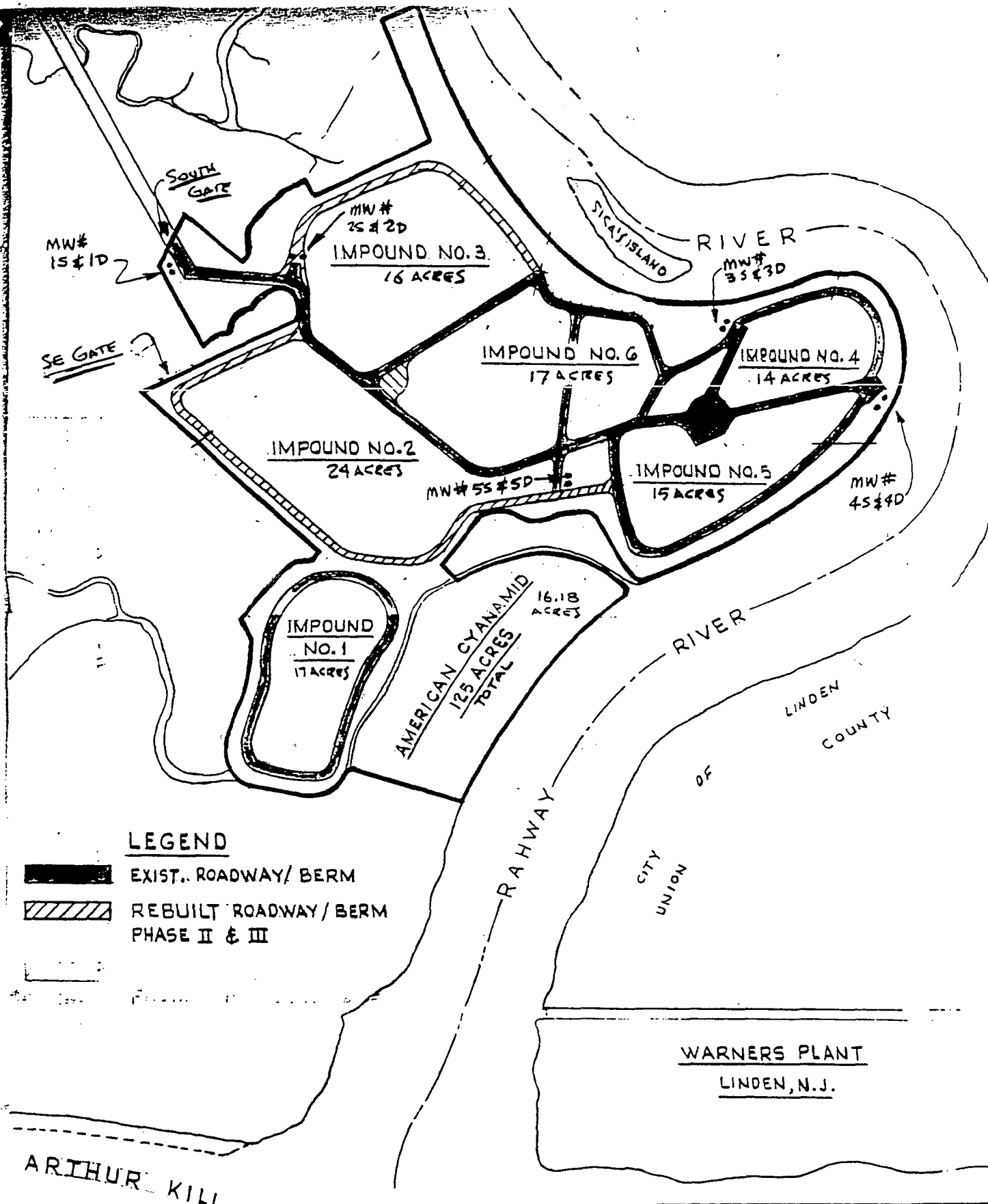
- EXIST. ROADWAY/ BERM
- REBUILT ROADWAY/ BERM
PHASE II & III

WARNERS PLANT
LINDEN, N.J.



CARTERET LANDFILL			
VEGETATION AND RESTORATION OF BER			
SCALE 1" = 200'			
PLANT WARNERS	BLOT	YARD	
DRAWN N. BUDAY	DATE	4-28-88	
CHECKED M. Cap	DATE	4/28/88 APPROVED M. Cap	
AMERICAN CYANAMID CO.			
LINDEN, N. J.			
IN-6111		SKW-X-15740	

EXHIBIT A

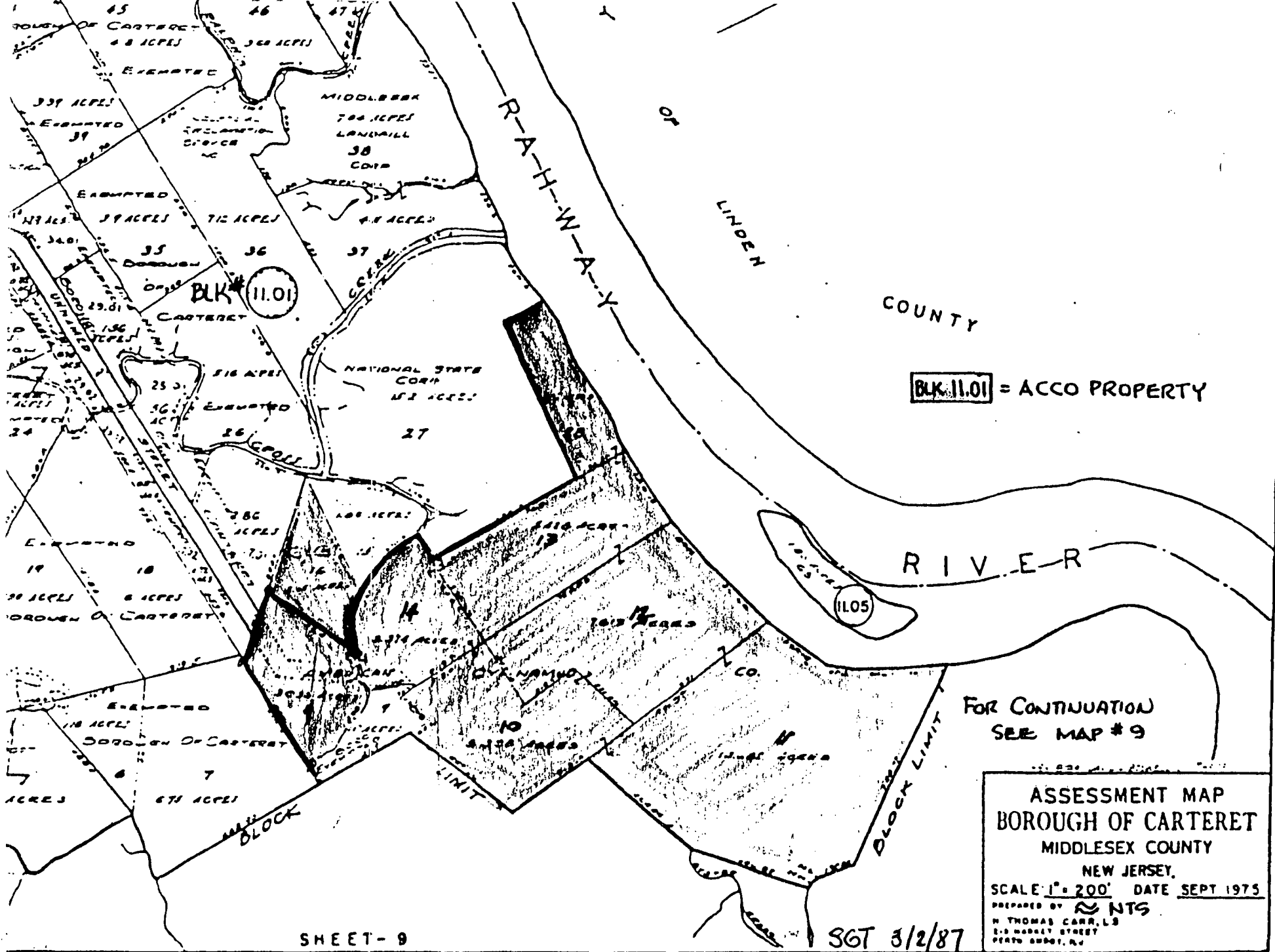
Tax Map



LEGEND

-  EXIST. ROADWAY/ BERM
-  REBUILT ROADWAY/ BERM PHASE II & III

CARTERET LANDFILL			
VEGETATION AND RESTORATION OF BEI			
SCALE 1" = 200'			
PLANT <u>WARNERS</u>	BY <u>LD</u>	YARD	
DRAWN <u>N. BUDAY</u>	DATE <u>4-28-88</u>		
CHECKED <u>MLC</u>	DATE <u>5/15/88</u>	APPROVED <u>MLC</u>	
AMERICAN CYANAMID CO.			
LINDEN, N. J.			
IN-6111	SKW-X-15740		



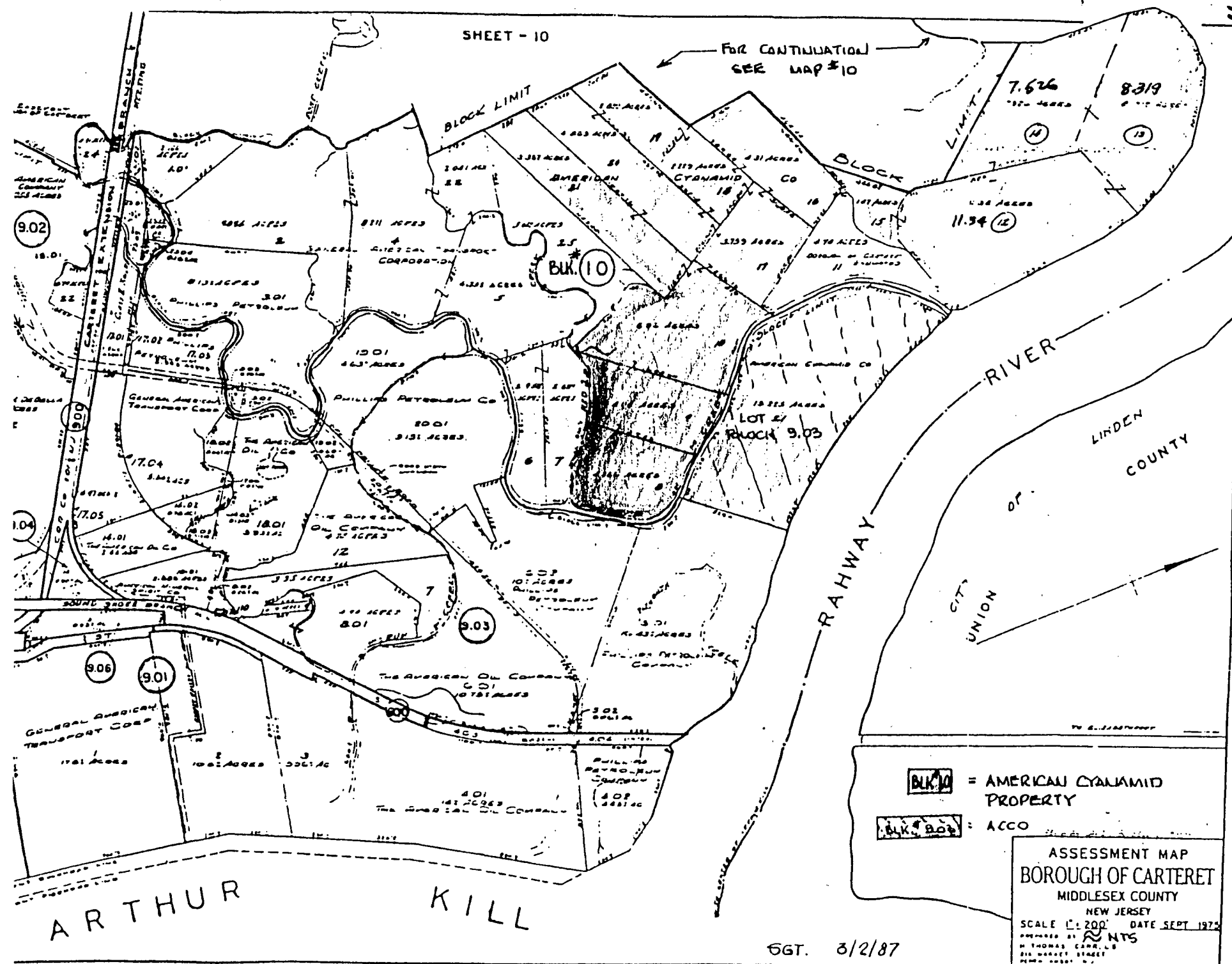


EXHIBIT B

Description of Affected Areas

kk/as/declare.agt

EXHIBIT B

- **SITE DESCRIPTION**
- **HISTORICAL OPERATION**
- **SITE LOCATION MAP**
- **TABLES 2 & 3
SUMMARY OF ANALYTICAL RESULTS**
- **TEST BORING, MAP**

EXHIBIT B

SITE DESCRIPTION

The Carteret Impoundments are located on a 110-acre tract encompassing 21 lots on three tax map blocks in Carteret, Middlesex County, New Jersey: Block 9.03, Lot 21; Block 10, Lots 8, 9, 10, 12 through 21; and Block 11.01, Lots 8, 10 through 14, and 28. Figure 1 illustrates the site location.

The Rahway River bounds the north and east portions of the site. American Oil Company and Phillips Petroleum operate petroleum storage facilities adjacent to the south and southeast property bounds, respectively. The Borough of Carteret owns a closed municipal landfill to the west, across Cross Creek. Industrial Reclamation Service, Inc. operates a salvage yard along the western property boundary, where unauthorized extension of salvage operations onto Cyanamid property was corrected by removal actions in 1987 during monitoring well installation.

HISTORICAL OPERATION

In the 1930s, Cyanamid began use of the Carteret Impoundments for management of residues from their alum and YPS production processes at the Warners Plant. The YPS residue deposition was terminated in 1970, and the alum residue deposition was terminated in 1974.

Alum, or aluminum sulfate $\{Al_2(SO_4)_3\}$, is commonly used as a flocculating agent in the treatment of drinking water. Alum production at the Warners plant involved the digestion of aluminum ore (bauxite) with sulfuric acid, resulting in a silica byproduct referred to as alum mud. Water was added to the alum mud to form a slurry, which was neutralized by addition of sodium hydroxide, prior to transfer to the Carteret Impoundments for settling and drying. Alum production and settling and drying of Alum mud at the Carteret Impoundments ceased in December 1974.

YPS, or sodium ferrocyanide $\{Na_4Fe(CN)_6\}$, has a variety of practical uses, including anti-caking of table and road salts, film development, electroplating, dyeing of textiles, and trace metal removal (American Cyanamid 1953). YPS production at the Warners Plant involved the reaction of calcium cyanide $\{Ca(CN)_2\}$ with ferrous sulfate (green copperas,

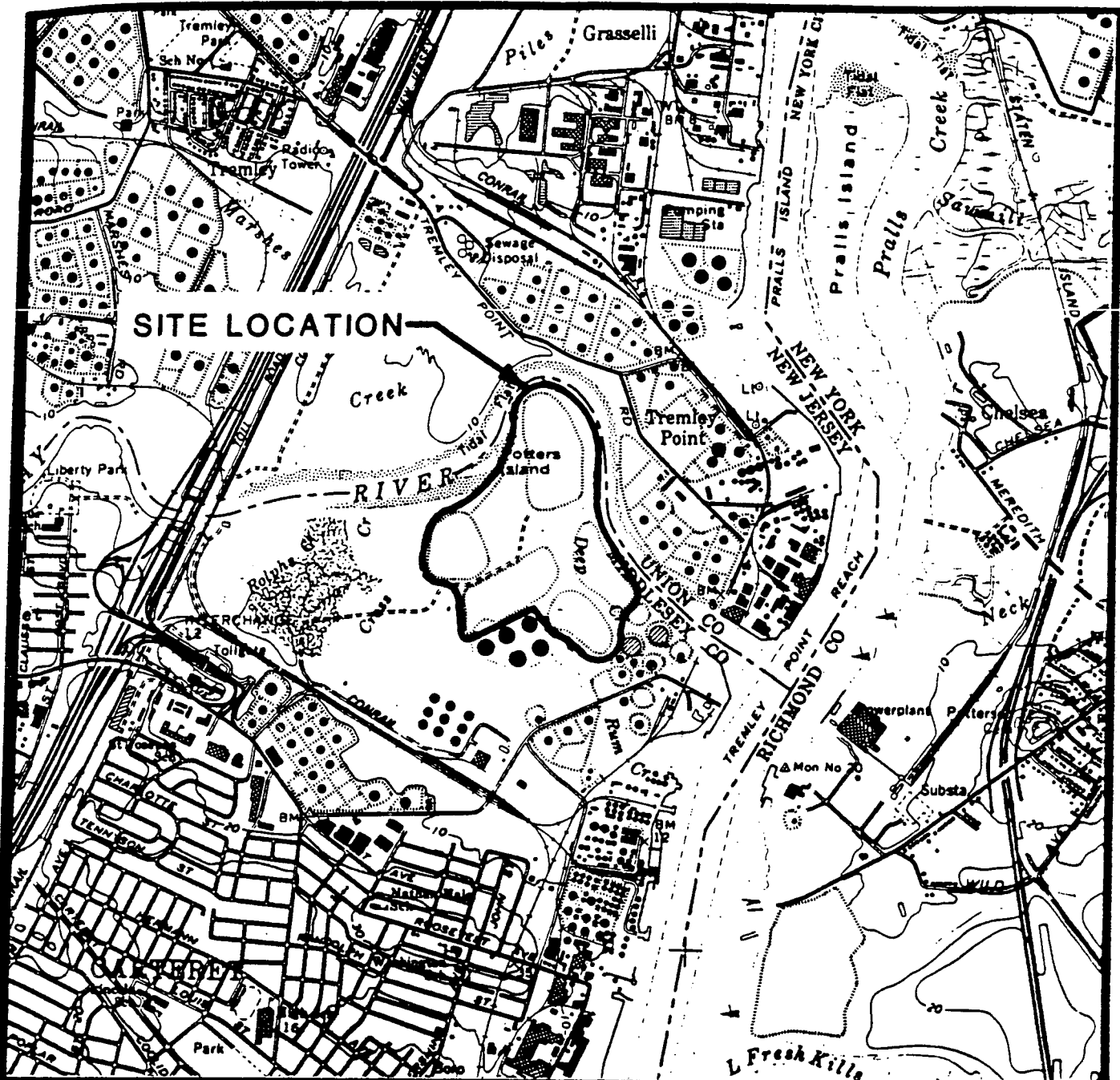
FeSO_4) and soda ash (Na_2CO_3) to yield sodium ferrocyanide. During the reaction, calcium carbonate (CaCO_3) and calcium sulfate (CaSO_4) precipitated. Calcium ferrocyanide is decomposed by addition of soda ash, then filtered. The filtrate is concentrated and the sodium ferrocyanide crystallizes (American Cyanamid 1953). YPS production at the Warners Plant was terminated in 1970.

Records indicate that for much of the period of deposition, the two residues were combined. The alkaline filtrate, or YPS mud, consisting primarily of calcium carbonate and calcium sulfate, was slurried with water, and combined with the alum mud, providing additional neutralization of the alum mud. A neutral residue resulting from the combination of the two process muds was then pumped via piping from the Warners Plant to the south side of the Rahway River, where settling of solids occurred in a series of six impoundments. Appendix A provides a plate depicting the configuration of the six impoundments.

The six impoundments were developed by building berms of imported soils. The estimated size and approximate age of each of the impoundments are as follows:

Impoundment	Size (Acres)	Approximate Age (years)
No. 1	12	62
No. 2	18	57
No. 3	15	57
No. 4	10	47
No. 5	15	42
No. 6	20	32

Impoundment No. 6 was the last impoundment in service at Carteret. Residue management in the Carteret Impoundments was terminated in 1974. Section 2.6 describes mitigative measures that have been completed since 1974 to enhance residue containment.

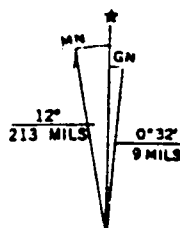


SOURCE:

- ARTHUR KILL, N.Y., N.J.
7.5 MINUTE QUADRANGLE
CONTOUR INTERVAL 10 FEET



SCALE: 1" = 2,000'



UTM GRID AND 1981 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET



BLASLAND, BOUCK & LEE
ENGINEERS & SCIENTISTS

AMERICAN CYANAMID COMPANY
CARTERET, NEW JERSEY
WORK PLAN

**SITE LOCATION
MAP**

PAGE

1

Table 2
Summary of Analytical Results - Organics
1981/1991 Residue Sampling
Carteret Impoundments
Carteret, New Jersey

Impoundment No.	1	1	2	2	2	2	3	3	3	3	3	4	4	4	4	5	5	5
Sample No.	S-1	S-2	S-1	S-2	S-5	S-6	S-1	S-2	S-1	S-2	S-3	S-9	S-9 Dup	S-10	S-11	S-7	S-7 Dup	S-8
Year	1981	1981	1981	1981	1991	1991	1981	1981	1991	1991	1991	1991	1991	1991	1991	1991	1991	1991
PCB (ug/kg)	nr	nr	nr	nr			nr	nr										
PCB									20									
PCB									1 JB									
PCB									8 B	6 BJ		19 JB	17 JB	29 B	26 B	2 JB	17 JB	22 B
PCB									1 J									
PCB	nr	nr	nr	nr			nr	nr										
PCB					11 J												na	
PCB									89 J									
PCB					18 J				1400	7 J								
PCB					38 J				2100	19 J	25 J							
PCB									1800									
PCB									1200									
PCB									1400									
PCB									1100									
PCB					350 BJ	200 BJ			390 BJ	200 BJ	150 BJ	150 BJ	240 BJ	150 BJ	110 BJ	110 BJ		100 BJ
PCB						20 J			290 J		41 J		16 J					
PCB									470 J									
PCB					45 J				2600	21 J	30 J							
PCB									320 J									
PCB					5 J				970	3 J								
PCB					350 BJ	610 BJ			310 BJ	340 BJ	340 BJ	620 BJ	680 B	1000 B	640 BJ	410 BJ		430 BJ
PCB									1300									
PCB					90 J	22 J			4100	44 J	56 J							
PCB					110 J	59 J				56 J	170 J							
PCB									580 J									
PCB					12 J	11 J			1800	5 J	13 J			7 J				
PCB									610 J	19 J	32 J							
PCB						41 J												
PCB					86 J	21 J			4400	56 J	31 J		15 J					
PCB					77 J	16 J			5100	34 J	44 J		17 J					
PCB	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	na	ND
PCB									170 JP									
PCB	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	na	ND
PCB									12P									

Blank spaces indicate that analyte was not detected in sample
not detected
nd: not analyzed
na: not analyzed
na: not analyzed
na: not analyzed

Table 3
Summary of Analytical Results - Inorganics
1981/1991 Residue Sampling
Carteret Impoundments
Carteret, New Jersey

Impoundment No.	1	1	2	2	2	2	3	3	3	3	3	4	4	4	4	5	5	5
Sample No.	S-1	S-2	S-1	S-2	S-5	S-6	S-1	S-2	S-1	S-2	S-3	S-9	S-9	S-10	S-11	S-7	S-7	S-8
Date	1981	1981	1981	1981	1991	1991	1981	1981	1991	1991	1991	1991	DUP	1991	1991	1991	DUP	1991
Inorganics (mg/kg)																		
Aluminum	3289	4057	110	78.8	27200	21400	5482	241	18400	27700	25800	6260	8870	15900	11700	10400	na	4450
Antimony	nr	nr	nr	nr		9.9 B	nr	nr	3.1 B	3.8 B				8.8 B			na	5.9 B
Arsenic	nr	nr	nr	nr	3.5	3.5	nr	nr	8	8.9	3		1.6 B	2.2	1.2 B		na	
Barium	nr	nr	nr	nr	59.2	41.1 B	nr	nr	113	61.4	49.4	105	64.5	40.7 B	21.9 B	78.1	na	45
Beryllium	nr	nr	nr	nr	1 B	0.81 B	nr	nr	1.2	0.94	0.56 B	0.70 B	0.99	1.2	0.78 B	0.57 B	na	0.36 B
Calcium	nr	nr	nr	nr	208000	219000	nr	nr	8690	167000	195000	233000	264000	284000	218000	247000	na	194000
Cobalt	nr	nr	nr	nr	6.3 B	4.8 B	nr	nr	13.1	4.4 B	2.4 B	4.0 B	3.3 B	5.5 B	2.3 B		na	
Copper	4.75	5.33	2.67	2.5	15.5		3.33	3.33	127	3.2 B	10.7	4.9	11.7	11.1	1.5 B	2.2 B	na	
Chromium	10.6	11.7	3.43	3.78	25	18.8	5.49	3.43	24.7	27.1	28.1	12	16.7	25.1	16.4	12.9	na	6.7
Iron	nr	nr	nr	nr	10400	8850	nr	nr	18200	10700	9060	3070	3930	5880	2780	742	na	1360
Lead	16.7	13.9			40.9	28.9	nr	nr	174	44.6	32.3	21.4	30.4	25.9	12.6	18.3	na	10.7
Magnesium	nr	nr	nr	nr	12300	31500	nr	nr	4320	13900	15700	3270	4390	12600	2570	752 B	na	1650
Manganese	105	135	109	46.5	296	281	148	89	260	310	269	53.1	97.7	253	55.3	11.4	na	38.8
Mercury	nr	nr	nr	nr			nr	nr	0.19	0.69	0.36						na	
Nickel	nr	nr	nr	nr	13.3		nr	nr	27.5	4.0 B	6.6 B	6.7 B	8.5 B	6.7 B		7.2 B	na	
Potassium	nr	nr	nr	nr	774 B	473 B	nr	nr	2920	474 B		412 B	469 B	300 B		348 B	na	
Sodium	nr	nr	nr	nr	2750	11300	nr	nr	1980	2340	3600	12100	11800	1740	1200	2110	na	5210
Vanadium	nr	nr	nr	nr	30.2	31.5	nr	nr	29.6	38.3	30	17.4	30	31.3	19.6	12.3	na	9.9
Zinc	37.3	58.4	2.07	2.58	32	15.6	42.5	2.55	914	38.5	29.4	10.5	25.9	22.4	2.5 B	3.4 B	na	
Cyanide (mg/kg)																		
Total Cyanide	693	816	622	929	768	153	2198	2374	3.9	337	472	972	103	1020	68.7	9.7	na	403
Soluble Cyanide	180	33	35	29	na	na	425	416	na	na	na	na	na	na	na	na	na	na
Traditional Parameters																		
pH	7.5	7.8	9.3	9.2	na	na	7.6	6.1	na	na	na	na	na	na	na	na	na	na

Blank spaces indicate that analyte was not detected in sample

ND: not detected

nr: not reported; na: not analyzed

B: constituent detected at similar concentration in a blank sample

J: quantitative estimate

CYTEC

CYTEC INDUSTRIES INC.
Five Garret Mountain Plaza
West Paterson, NJ 07424
Tel: (973) 357-3100

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

October 2, 2002

Mr. Haiyesh Shah, Case Manager
New Jersey Department of Environmental Protection
Bureau of Case Management
401 East State Street, Floor 5 West
Trenton, NJ 08625-0028

RE: Carteret Impoundments Site, Carteret Borough, Middlesex County
Restricted Use – No Further Action Letter and Covenant Not To Sue
Entire Site
Block/Lot: 9.03/21, 10/8, 9, 10, 12 to 21 and 11.01/8, 10 to 14 & 28
KCSL #NJD986603439

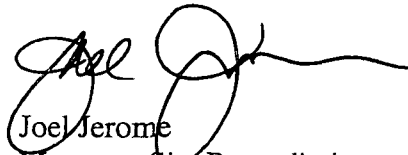
Dear Mr. Shah:

Enclosed please find a fully executed copy of the subject letter for our Carteret, NJ site. We have retained the second copy of this document for our files.

If you have any questions or need any additional information, please give me a call at (973) 569-4010.

Thank you for your assistance in this matter.

Sincerely,


Joel Jerome
Manager, Site Remediation

/jgw
Attach.

cc: E. C. Boyle - CYTEC Industries, Inc.
C. Donovan - Pitney Hardin
K. Hallinger - BBL



State of New Jersey

James E. McGreevey
Governor

Department of Environmental Protection

Bradley M. Campbell
Commissioner

Bureau of Case Management
Floor 5 West, P. O. Box 28, 401 East State Street
Trenton, NJ 08625-0028

Phone: 609-633-1455/Fax: 609-633-1439/Email: BRUCE.VENNER@DEP.STATE.NJ.US

SEP 24 2002

CERTIFIED MAIL

RETURN RECEIPT REQUESTED

No. 70012510 0005 3949 4817

Mr. Joel Jerome
CYTEC
5 Garret Mountain Plaza
West Paterson, NJ 07424

Dear Mr. Jerome:

Re: Carteret Impoundments Site, Carteret Borough, Middlesex County
Restricted Use --No Further Action letter and Covenant not to Sue
Entire Site
Block/Lot: 9.03/21, 10/8, 9, 10, 12 to 21 and 11.01/8, 10 to 14 & 28
KCSL # NJD986603439

The New Jersey Department of Environmental Protection (NJDEP) received a letter from Blasland, Bouck & Lee, on behalf of CYTEC, dated 19September2002 requesting no further action and covenant not to sue (NFA & CNS) for the referenced site. NJDEP and CYTEC signed an Administrative Consent Order (ACO) which became effective on September 5, 1990 and was amended on August 5, 1993.

Pursuant to N.J.S.A. 58:10B-13.1 and N.J.A.C. 7:26C, NJDEP makes a determination that no further action is necessary for the remediation of the referenced site. This action is based upon information in NJDEP case file, the CYTEC Remedial Investigation Workplan, the April 1994 Remedial Action Workplan (amended November 1994) as well as subsequent maintenance and monitoring reports and correspondence. In issuing this NFA & CNS, NJDEP has relied upon the certified representations and information provided to NJDEP so long as CYTEC did not withhold any information from NJDEP.

By issuance of this NFA & CNS, NJDEP acknowledges the completion of any necessary remedial activities pursuant to the Technical Requirements for Site Remediation (N.J.A.C. 7:26E) for the site.

NJDEP reserves its rights to require any person responsible for the contamination at the site to address Natural Resource Injuries.

NO FURTHER ACTION CONDITIONS

As a condition of this NFA & CNS, CYTEC as well as each subsequent owner, lessee and operator (collectively Successors) shall comply with each of the following:

1. Pursuant to N.J.S.A. 58:10B-12, CYTEC and the Successors shall inform NJDEP in writing whenever its name or address changes, within 14 calendar days after the change.
2. **Deed Notice:** Pursuant to N.J.S.A. 58:10B-13A, CYTEC and the Successors shall ensure that the Deed Notice (formerly known as Declaration of Environmental Restrictions-DER) filed on 4May1995 at Union County is complied with including maintenance of institutional and engineering controls and reporting to NJDEP. Pursuant to N.J.S.A. 58:10B-13h, an owner of a property on which a Deed Notice has been recorded shall notify any person who intends to excavate on the site of the nature and location of contamination existing on the site and of any conditions or measures necessary to prevent exposure to contaminants.
3. **Monitoring of Compliance for Deed Notices:** Pursuant to N.J.S.A. 58:10B-13.1, CYTEC and the Successors shall conduct monitoring for compliance and effectiveness of the institutional and engineering controls and submit written certification to NJDEP every two (2) years that the institutional and engineering controls are being properly maintained and continue to be protective of public health and safety and the environment. Any such certification shall include the information relied upon to determine that no changes have occurred.

COVENANT NOT TO SUE

NJDEP issues this Covenant Not to Sue pursuant to N.J.S.A. 58:10B-13.1. That statute requires a covenant not to sue with each no further action letter. However, in accordance with N.J.S.A. 58:10B-13.1, nothing in this Covenant shall benefit any person who is liable, pursuant to the Spill Compensation and Control Act (Spill Act), N.J.S.A. 58:10-23.11, for cleanup and removal costs and NJDEP makes no representation by the issuance of this Covenant, either express or implied, as to the Spill Act liability of any person.

NJDEP covenants, except as provided in the preceding paragraph, that it will not bring any civil action against the following:

- (a) the person who entered into ACO;
- (b) subsequent owners of the subject property;
- (c) subsequent lessees of the subject property; and
- (d) subsequent operators at the subject property

for the purposes of requiring remediation to address contamination which existed prior to the completion date of the Remedial Investigation for the referenced site identified above, including payment of compensation for damages to, or loss of, natural resources and the payment of cleanup and removal costs for such additional remediation of cleanup and removal costs for such additional remediation.

The person who undertook the remedial action, and each subsequent owner, lessee and operator, during that person's ownership, tenancy or operation, shall maintain those controls and conduct periodic compliance monitoring in the manner NJDEP requires.

Any person who may benefit from this Covenant is barred from making a claim against the Spill Compensation Fund, N.J.S.A. 58:10-23.11i, and the Sanitary Landfill Facility Contingency Fund, N.J.S.A. 13:1E-105, for any costs or damages relating to the remediation covered by this Covenant. All other claims against these funds will be controlled by the corresponding statutes and their implementing regulations.

Any person who may benefit from this Covenant is barred from making a claim against the Spill Compensation Fund, N.J.S.A. 58:10-23.11i, and the Sanitary Landfill Facility Contingency Fund, N.J.S.A. 13:1E-105, for any costs or damages relating to the remediation covered by this Covenant if NJDEP requires additional remediation in order to remove the institutional control. All other claims against these funds will be controlled by the corresponding statutes and their implementing regulations.

Pursuant to N.J.S.A. 58:10B-13.1d, this Covenant does not relieve any person from the obligation to comply in the future with laws and regulations. NJDEP reserves its right to take all appropriate enforcement for any failure to do so.

NJDEP may revoke this Covenant at any time after providing notice upon its determination that either:

- (a) any person with the legal obligation to comply with any condition in this NFA & CNS has failed to do so; or
- (b) any person with the legal obligation to maintain or monitor any engineering or institutional control has failed to do so.

This NFA & CNS, which NJDEP has executed in duplicate, shall take effect immediately once the person who entered into the ACO has signed and dated the NFA & CNS on the lines supplied below and NJDEP has received one copy of this document with original signatures of NJDEP and the person who entered into ACO.

Direct Billing:

Please be advised that pursuant to the Procedures for Department Oversight of the Remediation of Contaminated Sites (N.J.A.C. 7:26C et seq.), CYTEC is required to reimburse NJDEP for review of any submissions pursuant to the ACO. NJDEP will be issuing a bill shortly.

CYTEC Industries, Inc.

Name: T. P. Wozniak

Title: Treasurer

Signature: T. P. Wozniak

Date: 10/02/02

New Jersey Department of Environmental Protection

Name: Bruce Venner

Title: Chief

Signature: Bruce Venner

Date: 9/24/02

If you have any questions, please contact Haiyesh Shah at (609) 633-0718.

Sincerely,



Bruce Venner, Chief
Bureau of Case Management

C: Mr. John Sacco, NJDEP Office of Natural Resources Restoration